

## REMARKS

The issues outstanding in the Office Action mailed January 27, 2003, are the objections to the claims under 35 U.S.C. §112, and the rejections under 35 U.S.C. §103. Reconsideration of these issues, in view of the following discussion and the attached Declaration under 37 C.F.R. §1.132, is respectfully requested.

### Objections and Rejections Under 35 U.S.C. §112

The Examiner is thanked for pointing out various typographical and grammatical errors in the claims, at page 2 of the Office Action. Appropriate minor amendments to the claims have been made, which amendments do not change the scope thereof either literally or purposes of the doctrine of equivalents. Withdrawal of the objection and rejection is respectfully requested.

### Rejections Under 35 U.S.C. §103

Claims 2-10, 12, 17, 19-21, 23 and 25-31 have been rejected under 35 U.S.C. §103 over LaPierre '530 taken with Rubin '829 and Hellring '980. Reconsideration of this rejection is respectfully requested.

At the outset, there is a misunderstanding, perpetuated by the references, as to what constitutes an EU-1 zeolite. In particular, both Rubin and Hellring are relied upon for their indication that EU-1 zeolite is equivalent to ZSM-50 zeolite. It is on this basis that the Office Action argues it would be obvious to substitute EU-1 for ZSM 50 in the paraffin isomerization process of LaPierre. However, the basis underlying this assumption, specifically, that EU-1 zeolite is equivalent to ZSM-50, is in error.

Both Rubin and Hellring cite EP 42,226, for a disclosure of EU-1 zeolite. A copy of this disclosure is attached. The EP teaches that EU-1 zeolite is prepared with the use of a structuring agent which is an alkylated derivative of a polymethylene diamine, preferably an alkylated hexamethylene diamine such as a hexamethylene diamonium salt.

Rubin teaches that ZSM-50 is produced in new and improved form if dibenzoyl dimethyl ammonium-containing alkaline metal materials are employed as a structuring agent, although it

appears to suggest that ZSM-50 could also be produced by hexamethylene diamonium. Hellring also asserts that EU-1 and ZSM-50 have the same structure. Thus, these disclosures are, at best, misleading, inasmuch as the literature recognizes EU-1 zeolite is synthesized only with hexamethylene diamonium materials, and thus the term "EU-1" employed in the present claims distinguishes ZSM-50 as it is employed in the references. Thus, the present claims which recite "EU-1" zeolite are not suggested by the references even if it would be obvious to use ZSM-50 zeolite in a similar process; these are not the same catalysts.

Moreover, even if EU-1 and ZSM-50 have similar structures, this does not mean that the zeolites have the same catalytic properties and are the same. In fact, EU-1 and ZSM-50, although arguably possessing the same framework topology, exhibit different product selectivity, perhaps due to the distribution of active brönsted acid cites. Indeed, Rubin verifies, by teaching that different structural agents produce a "improvement," that the use of a different organic template in producing a zeolite can lead to various unpredictable catalytic differences in properties. It is therefore respectfully submitted that it would not be obvious to use EU-1 zeolite, synthesized with the use of hexamethylene diamonium directing agent (much less the alkylated derivatives of polymethylene materials disclosed in EP '226), in view of the disclosure of ZSM-50, produced with dibenzoyldimethylammonium materials as in Rubin or Hellring. Although, it is submitted that the use of the term "EU-1" thus distinguishes over the use of the term "ZSM-50," attention is also directed to newly added claims 32-37, which recite the use of specific structuring agents which are not suggested by the combination of the references.

Finally, as further evidence of the non-obviousness of the use of EU-1 zeolite versus ZSM-50, and of the use the structuring agent disclosed in EP '226 versus that of the ZSM-50 references cited in the present Office Action, attention is directed to the attached Declaration under 37 C.F.R. §1.132. The Declaration demonstrates that a ZSM-50 zeolite, prepared in accordance with Rubin '829, is less effective for reducing the pour point of a paraffin feed, compared to a catalyst in accordance with the invention, using EU-1, prepared in accordance with EP 42,226. This provides further evidence of the non-obviousness of the present invention.

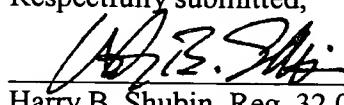
The newly added claims are supported in the present specification at page 3, lines 5-7, page 16, lines 1 and 2, page 17, lines 22 and 23, and page 18, lines 21-22, and by the EP '226,

incorporated by reference for its disclosure of the method of making the EU-1 zeolite. See the paragraph bridging pages 7 and 8 of the EP, and page 8, lines 22-27.

Accordingly, the claims of the application are submitted to be in condition for allowance. However, if the Examiner has any questions or comments, he or she is cordially invited to telephone undersigned at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

  
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